

**6. APPLICATION** The table lists the concentration of dissolved oxygen (DO) in parts per million at various temperatures in degrees Celsius from a sample of lake water.

a. Graph the data.

b. Write an equation in point-slope form that models the data.

Slope  $-0.5$   
 $\rightarrow 0.46$   
 $-0.6$   
 $-0.69$   
 $\rightarrow 0.72$

$$y = m(x - x_1) + y_1$$

$$y = -0.5(x - 13) + 11$$

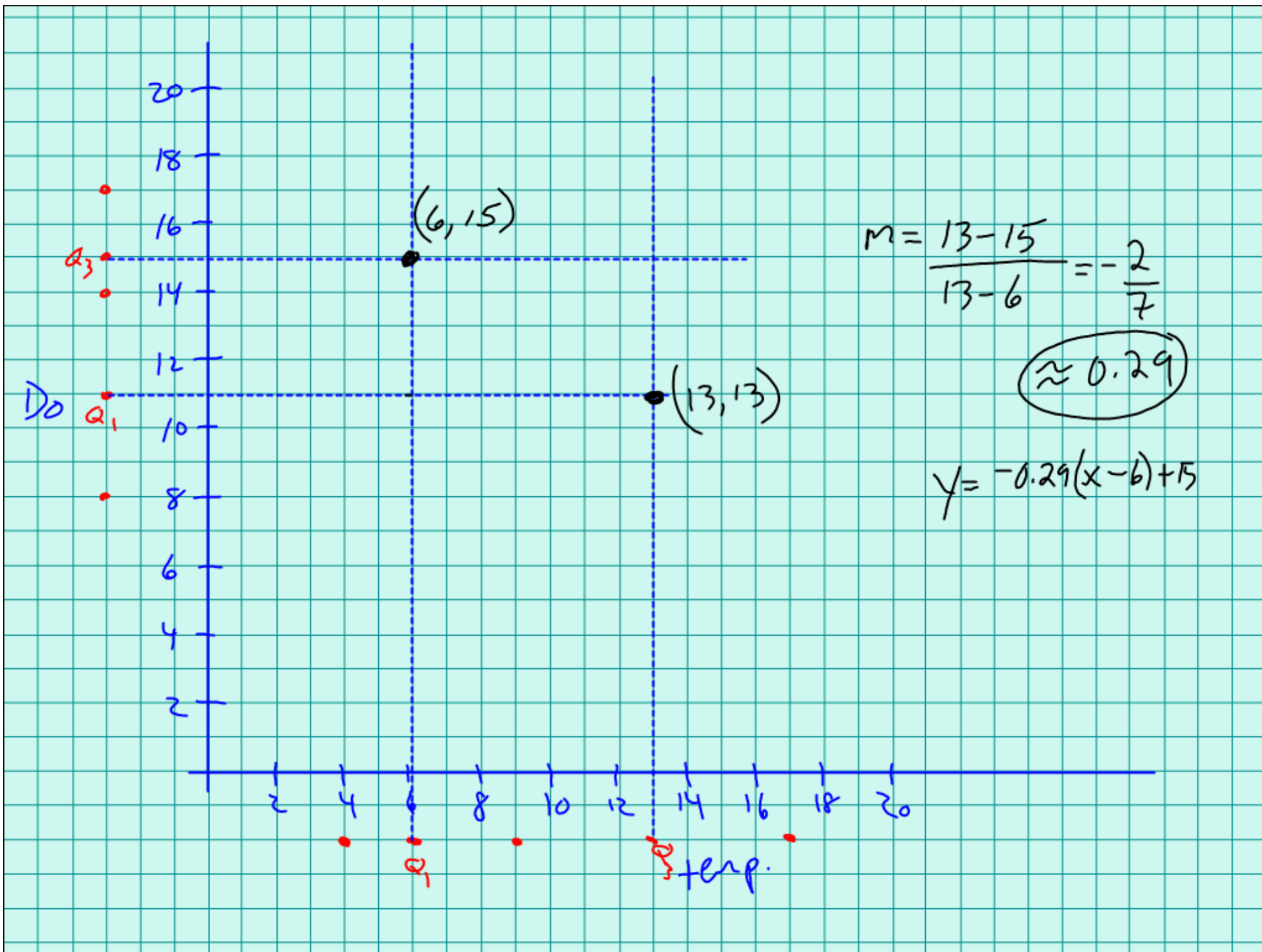
**8.** Give the five-number summary for each data set.

a. {1, 2, 4, 7, 18, 20, 21, 21, 26, 31, 37, 45, 45, 47, 48}

b. {30, 32, 33, 35, 39, 41, 42, 47, 72, 74}

min,  $Q_1$ , Med,  $Q_3$ , Max  
 1, 7, 21, 45, 48  
 30, 33, 40, 47, 74

Temperature ( $^{\circ}\text{C}$ ) $x$	DO (ppm) $y$
17	8
15	9
13	11
16	10
11	14
13	11
10	14
8	14
6	16
7	13
8	14
4	17
5	15
9	13
6	16



## Men's 400-meter Dash

Year	Champion	Country	Time (sec)
1952	George Rhoden	Jamaica	45.9
1956	Charles Jenkins	United States	46.7
1960	Otis Davis	United States	44.9
1964	Mike Larrabee	United States	45.1
1968	Lee Evans	United States	43.9
1972	Vincent Mathews	United States	44.7
1976	Alberto Juantorena	Cuba	44.3
1980	Viktor Markin	USSR	44.6
1984	Alonzo Babers	United States	44.3
1988	Steve Lewis	United States	43.9
1992	Quincy Watts	United States	43.5
1996	Michael Johnson	United States	43.5

(2000 World Almanac, p. 917)

Step 1

5 # Summary  
of each

Step 2

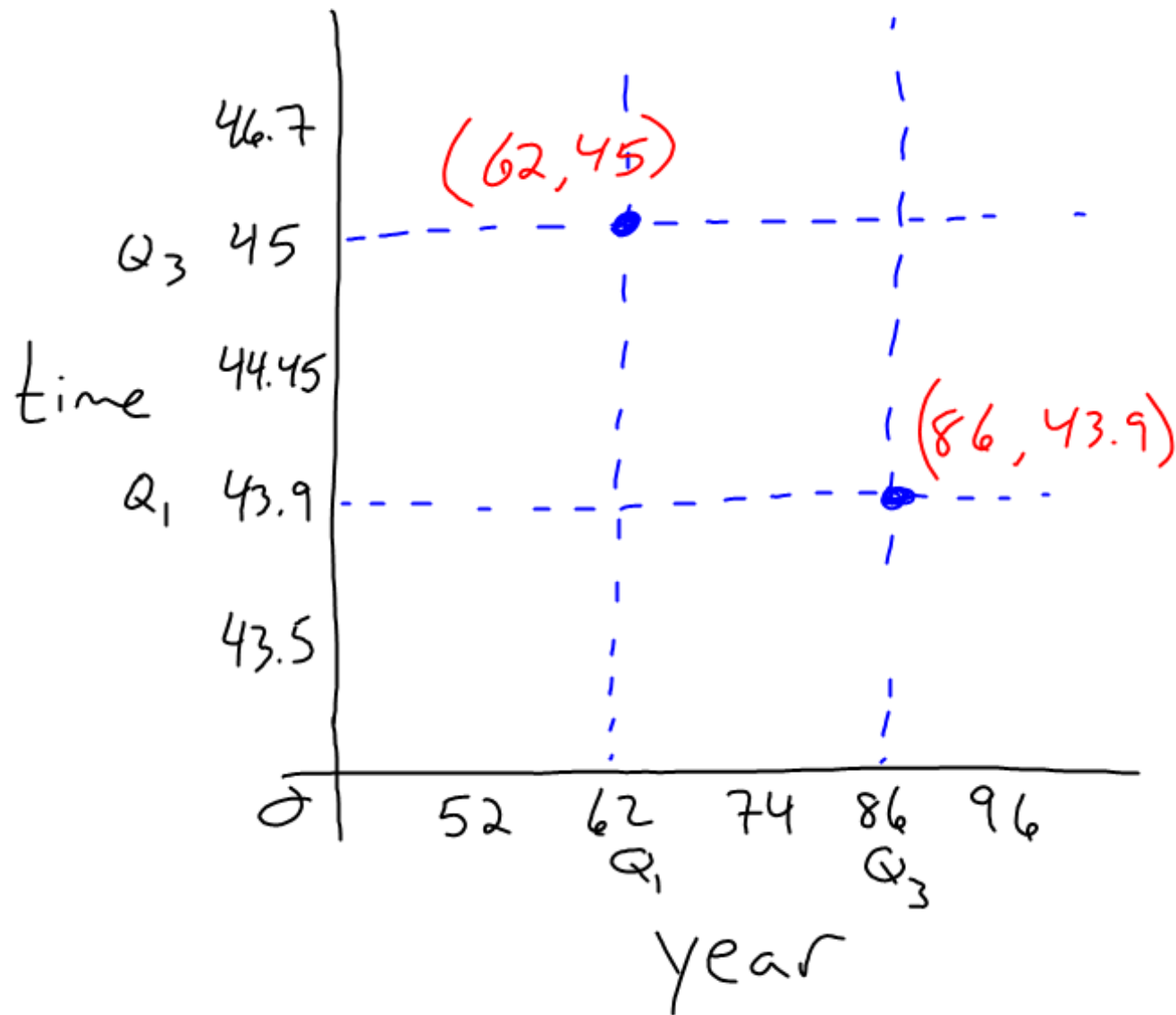
get pts.

Step 3

find slope

Step 4

find eq.



$$\frac{43.9 - 45}{86 - 62} = \frac{-1.1}{24}$$

$$m \approx -0.05$$

$$y = m(x - x_1) + y_1$$

$$y = -0.05(x - 62) + 45$$

Sect. 5.6 #12

HW